AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

23. (New) A fusion protein characterized in that it comprises the amino acid sequences of different allergens belonging to the non-specific Lipid Transfer Protein (ns-LTPs) family, in that said sequences lack one or more of the four disulphide bridges present in the sequences of the wild type allergens, at least one in the amino terminal region comprised between amino acid residues 1 and 30 and in that said sequences maintain essentially the same length as the sequences of wild type allergens.

24. (New) The fusion protein according to claim 23, characterized in that the amino acid sequence of each of the allergens is independently mutated by elimination or substitution of one or more cysteine residues involved in the formation of a disulphide bridge.

25. (New) The fusion protein according to claim 23, characterized in that it comprises allergens Parj1 and Parj2 of the *Parietaria judaica* species.

26. (New) The fusion protein according to claim 25, characterized in that the amino acid sequence of each of the allergens is independently mutated by elimination or substitution of one or more cysteine residues in positions corresponding to the positions 4, 14, 29, 30, 50, 52, 75 and 91 of the amino acid sequence of Parj1 and/or Parj2 allergen.

27. (New) The fusion protein according to claim 26, characterized in that it contains amino acid sequences of Parj1 and Parj2 allergens, both independently modified by substitution of cysteine residues with Asn, Ser, Thr, Ile, Met, Gly, Ala, Val, Gln or Leu residues in positions 29 and 30 or 4, 29 and 30 or 29, 30, 50, 52.

28. (New) The fusion protein according to claim 27, comprising the amino acid sequence SEQ ID NO: 4.

29. (New) A nucleotide sequence comprising the DNA coding for the fusion protein according to claim 25.

30. (New) The nucleotide sequence according to claim 29 comprising the nucleotide sequence SEQ ID NO: 3.

31. (New) An expression or cloning system comprising the nucleotide sequence according to claim 30 flanked by suitable sequences for controlling, promoting and regulating the expression.

32. (New) A host cell transformed by means of the expression or cloning system according to claim 31.

33. (New) The fusion protein according to claim 25, for use in a diagnostic or

therapeutic treatment method *in vivo* and/or *in vitro*.

34. (New) The fusion protein according to claim 33, for use as a hypoallergenic immunologic agent in the specific immunotherapy (SIT) treatment of allergies.

35. (New) The fusion protein according to claim 33, for use in treatment of rhinitis, conjunctivitis, urticaria, angioedema, eczema, dermatitides, asthma, or anaphylactic shock.

36. (New) The fusion protein according to claim 33, for preparation of a DNA vaccine.

37. (New) A pharmaceutical composition comprising the fusion protein according to claim 25 and a pharmaceutically acceptable excipient.

38. (New) The pharmaceutical composition according to claim 37 in the form of a solution, suspension, emulsion, cream, ointment or implant.

39. (New) The pharmaceutical composition according to claim 37, for parenteral, subcutaneous, intramuscular, intravenous, topical, oral administration or for subcutaneous implantation.

40. (New) A method of preparation of the fusion protein according to claim 25,

characterized in that suitably mutated amino acid sequences of different allergens are produced and linked directly or via a spacer for chemical synthesis or by expression, in the form of fusion protein, in a genetically modified host cell.

41. (New) The method of preparation according to claim 40, characterized in that a host cell is transformed with an expression vector comprising DNA coding for the amino acid sequences in fused form, which is mutated via site-specific mutagenesis in one or more codons coding for one or more cysteine residues.

42. (New) The method of preparation according to claim 41, characterized in that one or more cysteine residues are substituted with Asn, Ser, Thr, Ile, Met, Gly, Ala, Val, Gln or Leu residues.

43. (New) The method of preparation according to claim 40, characterized in that one or more cysteine residues in position 29 and 30; 4, 29 and 30; or 29, 30, 50 and 52 are substituted with alanine or serine residues.

44. (New) The method of preparation of a pharmaceutical composition according to claim 37, characterized in that the heterodimer protein is mixed in an immunologically active amount to a pharmaceutically acceptable excipient.